

MODIFIED UNIFIED CLASSIFICATION SYSTEM FOR SOILS				
MAJOR DIVISIONS	SYMBOLS		LABORATORY CLASSIFICATION CRITERIA	
	USCS	GRAPH COLOUR		
COARSE GRAINED SOILS (MORE THAN HALF BY WEIGHT LARGER THAN 75µm)	CLEAN GRAVELS (TRACE OR NO FINES)	GW	RED	WELL GRADED GRAVELS, GRAVEL SAND MIXTURES, LITTLE OR NO FINES $C_u > 4.75, U > 6$
	DIRTY GRAVELS (WITH SOME OR MORE FINES)	GM	YELLOW	POORLY GRADED GRAVELS, GRAVEL SAND MIXTURES, LITTLE OR NO FINES ATTERBERG LIMITS BELOW "A" LINE OR FLEES THAN 4
	CLEAN SANDS (TRACE OR NO FINES)	SW	RED	WELL GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES $C_u > 4.75, U > 6$
	DIRTY SANDS (WITH SOME OR MORE FINES)	SM	YELLOW	POORLY GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES NOT MEETING ABOVE REQUIREMENTS
		SC	YELLOW	SILTY SANDS, SAND-SILT MIXTURES ATTERBERG LIMITS ABOVE "A" LINE AND MORE THAN 7
		GC	YELLOW	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES ATTERBERG LIMITS ABOVE "A" LINE OR FLEES THAN 4
FINE GRAINED SOILS (MORE THAN HALF BY WEIGHT SMALLER THAN 75µm)	$W_L < 50\%$	ML	GREEN	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY SANDS OF SLIGHT PLASTICITY
	$W_L > 50\%$	MH	BLUE	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS, FINE SAND OR SILTY SOILS
	$W_L < 30\%$	CL	GREEN-BLUE	INORGANIC CLAYS OF LOW PLASTICITY, GRAVELLY, SANDY OR SILTY CLAYS, LEAN CLAYS
	$30\% < W_L < 50\%$	CI	GREEN-BLUE	INORGANIC CLAYS OF MEDIUM PLASTICITY, SILTY CLAYS
	$W_L > 50\%$	CH	BLUE	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
	$W_L < 50\%$	OL	GREEN	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	OH	BLUE	ORGANIC CLAYS OF HIGH PLASTICITY	
HIGHLY ORGANIC SOILS	PT	ORANGE	PEAT AND OTHER HIGHLY ORGANIC SOILS STRONG COLOUR OR ODOR, AND OFTEN FIBROUS TEXTURE	

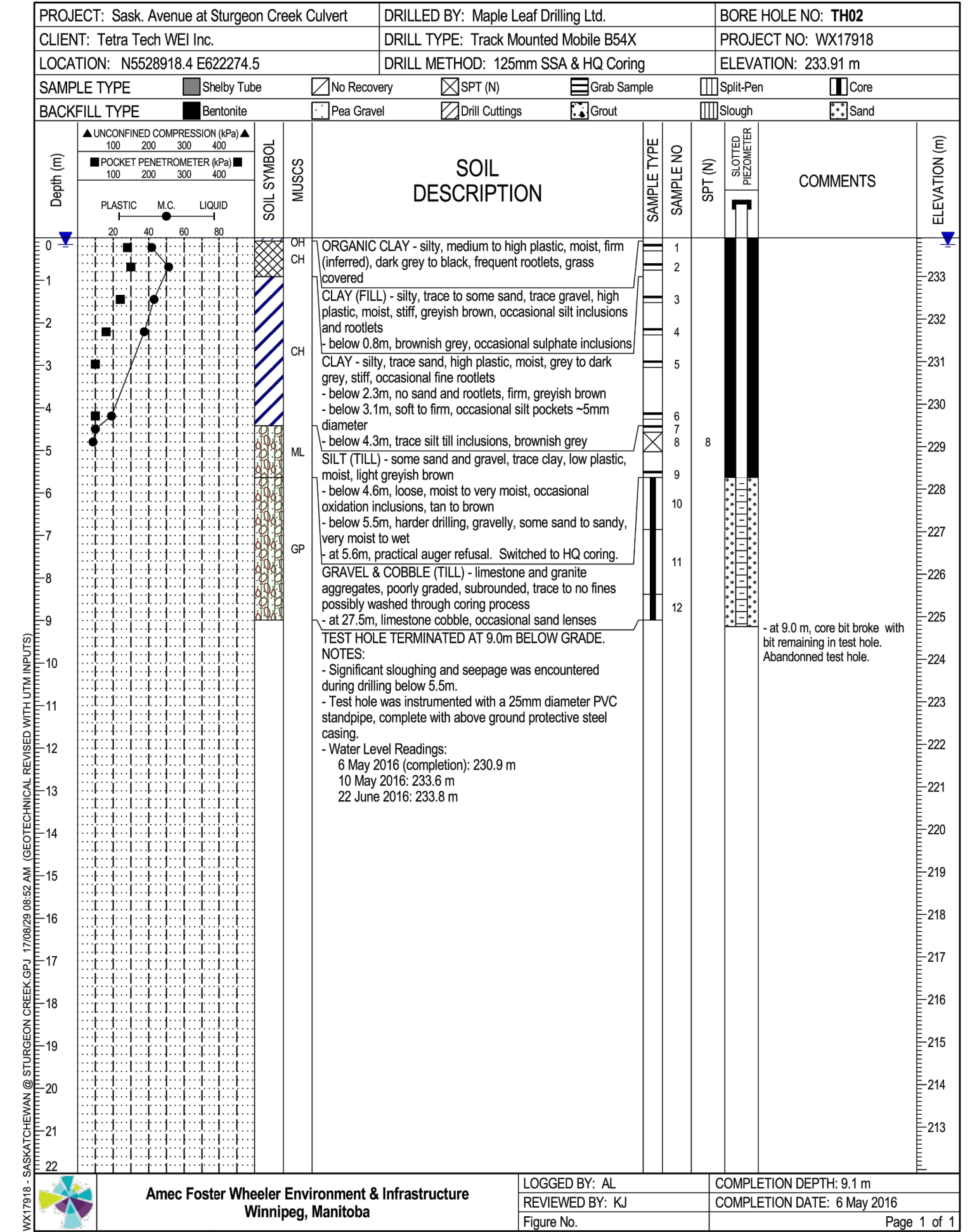
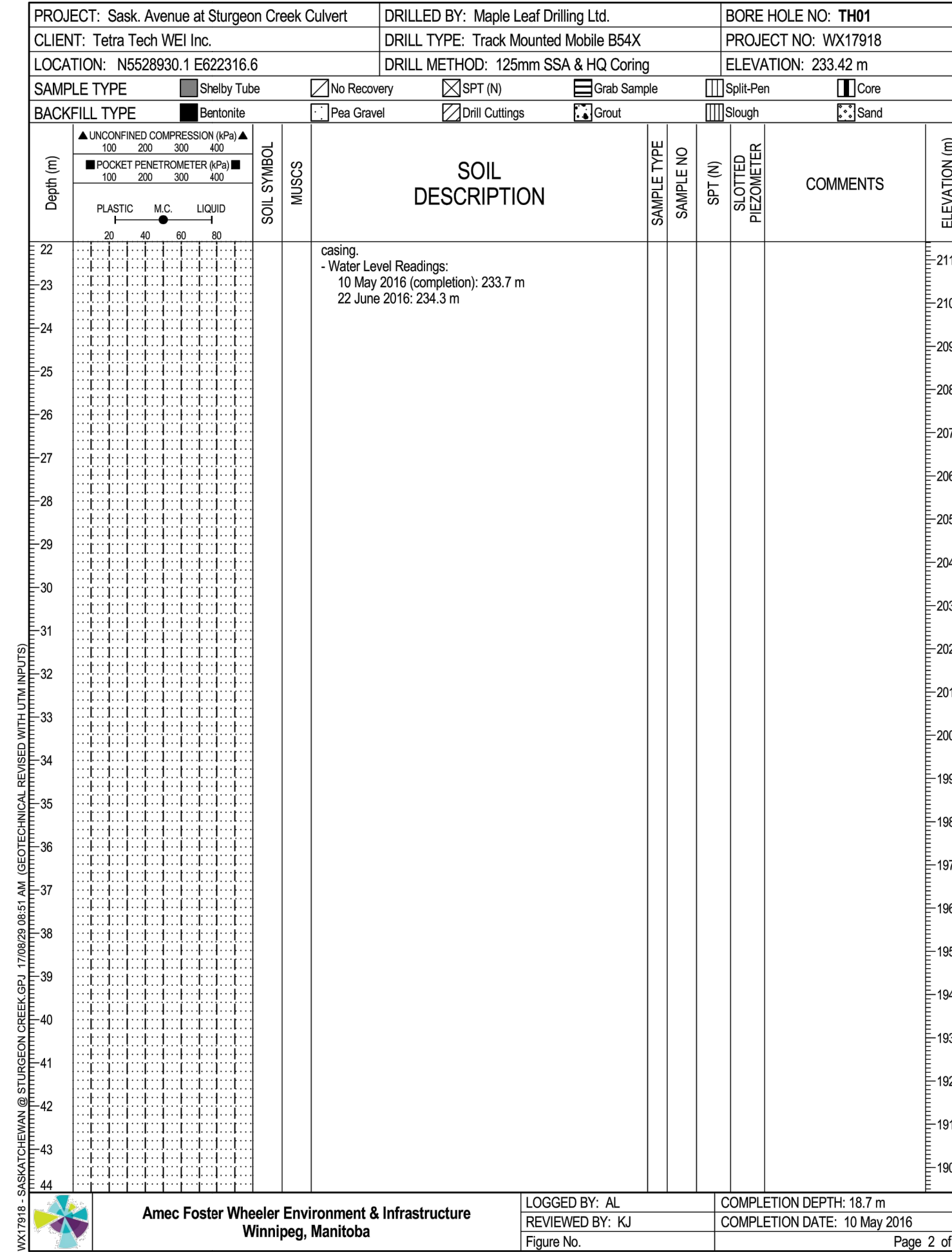
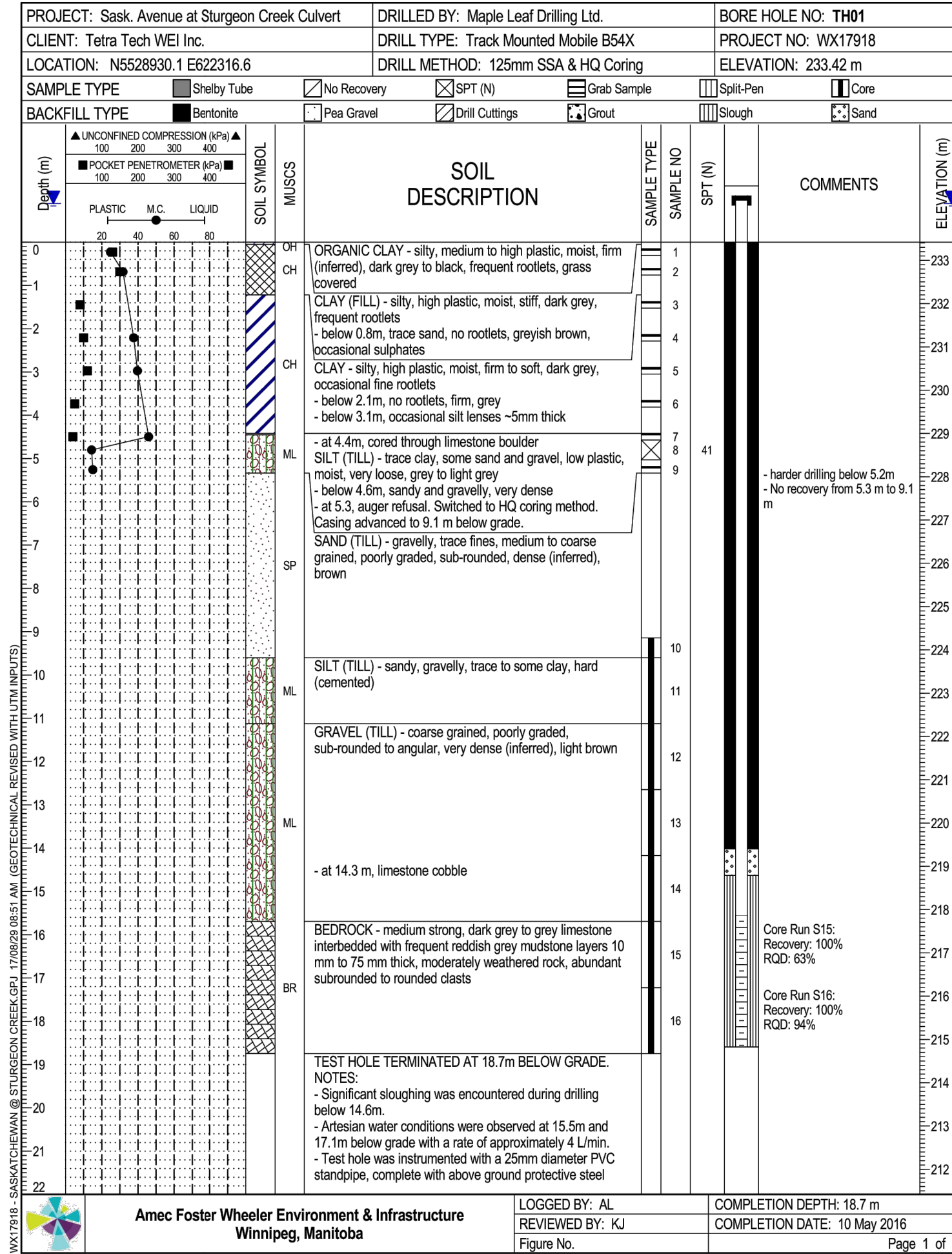
SPECIAL SYMBOLS	
LIMESTONE	OL (SAND)
SANDSTONE	SH (SHALE)
SILTSTONE	FL (UNDIFFERENTIATED)

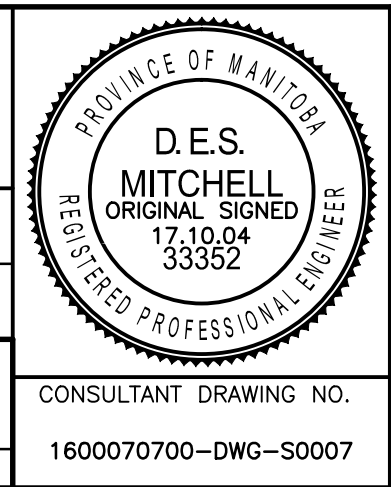
SOIL COMPONENTS			
FRACTION	U.S. STANDARD METRIC SIEVE SIZE	DEFINING RANGES OF PERCENT BY WEIGHT OF MINOR COMPONENTS	DESCRIPTOR
GRAVEL	PASSING 75mm	RETAINED 19mm	AND
FINE	19mm	4.75mm	Y EY
SAND	PASSING 4.75mm	2.00mm	SOME
COARSE	2.00mm	425µm	TRACE
MEDIUM	425µm	75µm	
FINE	75µm		

OVERSIZED MATERIAL	
ROUNDED OR SUBROUNDED: COBBLES 75mm to 200mm Boulders > 200mm	NOT ROUNDED: ROCK FRAGMENTS > 75mm ROCKS > 5.0 METRE IN VOLUME

B.M. ELEV.			
DESIGNED BY	D.M.	CHECKED BY	J.Z.
DRAWN BY	B.M.	APPROVED BY	E.F.S.
HOR. SCALE:	AS NOTED	ACCEPTED BY	DATE
VERTICAL:	AS NOTED	SIGNED BY:	D. MUHURDAREVIC, P.ENG.
0 ISSUED FOR TENDER	17.10.04	D.M.	17.10.04
NO. REVISIONS	DATE	BY	DATE



**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION

**SASKATCHEWAN AVE AT STURGEON CREEK**  
BRIDGE CONSTRUCTION

CITY DRAWING NUMBER  
**B248-17-007**

SHEET **7** OF **69**

**BOREHOLE LOGS**  
SHEET 1 OF 2

COMPLETION DEPTH: 18.7 m  
COMPLETION DATE: 10 May 2016

LOGGED BY: AL  
REVIEWED BY: KJ  
Figure No.

LOGGED BY: AL  
REVIEWED BY: KJ  
Figure No.

LOGGED BY: AL  
REVIEWED BY: KJ  
Figure No.

COMPLETION DEPTH: 9.1 m  
COMPLETION DATE: 6 May 2016

LOGGED BY: AL  
REVIEWED BY: KJ  
Figure No.

1600070700-DWG-S0007